

BURNABY BICYCLE ADVISORY COMMITTEE

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

RE: CYCLING NETWORKS IN BURNABY: PROPOSED REFINEMENTS TO THE  
BURNABY TRANSPORTATION PLAN

RECOMMENDATION:

1. **THAT** Council be requested to forward the attached report to the Traffic and Transportation Committee (Transportation and Transit Division) for consideration.

R E P O R T

The Burnaby Bicycle Advisory Committee, at its meeting held on 1999 September 23, received and adopted the attached report to advance proposed changes in the Cycling System component of the Burnaby Transportation Plan and the development of a cycling route implementation process.

Respectfully submitted,

Mayor D. Drummond  
Chair

Councillor D. Lawson,  
Vice Chair

:COPY - CITY MANAGER  
- DIRECTOR PLANNING & BUILDING  
- DIRECTOR ENGINEERING  
- DIRECTOR PARKS, RECREATION & CULTURAL SERVICES  
- CITY CLERK

TO: **BICYCLE ADVISORY COMMITTEE** **DATE:** 1999 September 21

FROM: DIRECTOR PLANNING AND BUILDING

SUBJECT: **CYCLING NETWORKS IN BURNABY: PROPOSED REFINEMENTS TO THE BURNABY TRANSPORTATION PLAN**

PURPOSE: To advance proposed changes in the Cycling System component of the Burnaby Transportation Plan and the development of a cycling route implementation process.

**RECOMMENDATION:**

1. **THAT** Council be requested to forward this report to the Traffic and Transportation Committee (Transportation and Transit Division) for consideration.

**REPORT**

**1.0 BACKGROUND**

Council, at its regular meeting of 1998 October 19, received a staff report entitled "*Paved Shoulder Costs for Cycle Roads*." Council referred the same to the Bicycle Advisory Committee to review a priority system, potential Provincial funding sources, flooding implications, and integration with the Burnaby Transportation Plan. In response, the BAC provided Council with a report containing four recommendations at its regular 1998 December 14 meeting. These recommendations were subsequently adopted by Council.

Arising from the discussions related to a priority system for paved shoulders was a need to consider other cycling facilities within Burnaby. As such, BAC members and staff identified opportunities and constraints for each of the three levels of cycling facilities (Cycle Roads, Alternative Cycle Roads, and Urban Trails), gaps in the cycling network, and a need for a clear 'route by route' implementation process.

These issues have been discussed further and a general conclusion is that improvements to the cycling network as a whole should be pursued as a refinement to the Cycling System component of the Burnaby Transportation Plan, so that it is incorporated as transportation policy and provides a one-stop reference for future bicycle-related decisions and information. This report reviews issues relevant to this topic, and makes several recommendations with the goal of resolving Burnaby cycling issues and refining the cycle network.

## 2.0 EXISTING CYCLING SYSTEM

The Burnaby Transportation Plan provides three levels of cycling facilities based on mobility and access functions, the range of cycling confidence and fitness levels, and physical opportunities and constraints:

- **Cycle Road Network (CRN)** - on-street facility with wider curb lanes on busier roads (e.g. Royal Oak between Oakland and Deer Lake Parkway);
- **Alternative Cycle Routes (ACR)** - primarily an on-street facility on local streets acting as a bypass route where a CRN facility is difficult to provide (e.g. Frances-Union Bike Route as an alternative to Hastings St.);
- **Urban Trails (UT)** - primarily an off-street facility intended to encourage walking and cycling as well as provide alternative access to major urban facilities and parks (ie. Burnaby Mountain Urban Trail).

A fundamental consideration is that the cyclist have available for use a particular route or portion of a route which best suits the individual's needs based upon a range of factors including safety, traffic volumes and speeds, directness, fitness, confidence level, weather, time of day (night), etc. Consequently, a cyclist can be expected to use a hybrid of facilities and routes depending on these factors. A fully integrated Cycling System, as in the Burnaby Transportation Plan, provides a range of cycling options in response to these factors. A graphic depicting this concept is attached (see attached Figure 1).

There are some limitations to each of the three tiers as indicated by comments from the BAC, correspondence from the general public, and staff knowledge gained in managing the system to date:

- The **Cycle Road Network (CRN)** is defined in the Burnaby Transportation Plan but the majority of roads are well beyond the 5 year Capital Plan as most arterial roads are already constructed to finished standard with no bike provision. Retrofitting is often not feasible given construction costs and right-of-way requirements. Redevelopment adjacent to most of these roads in order to accommodate additional curb lane width is unlikely in the short to medium term. Other roads in this network are at an interim standard width and the City is currently increasing the width provided to cyclists during the pavement rehabilitation process when reasonably feasible in terms of cost.

- **Alternate Cycle Roads (ACR)** are well used and liked by the cycling community and there is a much larger short to medium term need for more routes than the three routes identified in the Transportation Plan. Historically, ACR development up to this point has been reactive and lacking a larger integrated vision. Expanding the ACR network would increase route options for the majority of cyclists.
- **Urban Trails (UT)**, while relatively more costly to implement and sometimes difficult to implement due to insufficient off-street space, are a growing and important element of the cycling network. Urban Trails may sometimes have to be combined with ACRs to form complete cycle routes [e.g. North-South route utilizing a residential road (Sussex - ACR), a short section of urban trail, and a more busy road (Wayburne - CRN)].

### 3.0 PROPOSED REFINEMENT TO CYCLING SYSTEM IN THE BURNABY TRANSPORTATION PLAN

Refining the Cycling Concept in the Burnaby Transportation Plan would serve several purposes, including coordinating the three levels of cycling facilities with road plans, identifying and prioritizing bicycle improvement projects, strengthening Burnaby's existing bicycle planning approach particularly for provincial Cycle Network Program (CNP) funding applications, providing direction for future BAC members, and making more efficient use of staff resources. This would also be useful in negotiating with TransLink's regional bicycle master plan currently under development, as well as the GVRD's Regional Sector Greenway Planning process, anticipated to commence this autumn.

The process of refining the Cycling Concept in the Burnaby Transportation Plan would involve two phases. Phase 1 of this process (Draft Concept Plan Development) would establish bike route objectives and evaluation criteria, as well as origin and destination points with input from the BAC. This information would translate into a conceptual "connect-the-dots" type of draft plan highlighting the important cycling corridors, for consideration by the Traffic and Transportation Committee and Council. Staff will also continue to assure that the input of the BAC is maintained through this process.

Phase II (Public Process) would follow Traffic and Transportation Committee and Council endorsement of the Draft Concept Plan developed in Phase 1 for the purposes of obtaining public input, and display the plan at four public open house events in each of the four quadrants of the City (NE, NW, SE, SW). The intent of the open houses would be to gather public input regarding bike routes, establish a framework of criteria for evaluating alternate route options, and expose the plan to a wider audience.

The results of the open houses would be folded into the Plan and reported back to the Traffic and Transportation Committee and Council for consideration and adoption as the Cycling System component of the Burnaby Transportation Plan.

A conceptual flow chart for these two phases is shown in Figure 2 attached.

Although the review of the cycling system within the Burnaby Transportation Plan would involve all three types of facilities (CR, ACR and UT) the emphasis would likely focus on the ACR network as ACR's cater to a wide range of cycling abilities (see Figure 1) and are the most cost effective type of bicycle facility. In most cases existing roads would be used with minor traffic calming additions, if required, and signage to guide cyclists along an identified, continuous route. Urban Trails would continue to be recommended and pursued where appropriate and feasible, and Cycle Roads would continue to be developed as roads are constructed or reconstructed and funding is available.

#### **4.0 ROUTE IMPLEMENTATION**

Once the Cycling System component has been further refined and adopted by Council, staff would review BAC priorities, general cycling/pedestrian needs, and related opportunities and/or constraints and identify particular conceptual routes for implementation. Specific route options would then be advanced with further public input invited at an open house for area residents. The purpose of the open house would be to solicit further public comments regarding specific routes and alignments, address any misconceptions regarding bike routes and urban trails, and expose the Plan to a wider audience. Following this input process, staff would develop a preferred, specific alignment and costs and seek Council approval and consideration, where appropriate, to apply for CNP matching funding.

A conceptual flow chart for the implementation process is shown in Figure 3 attached.

#### **5.0 FUNDING**

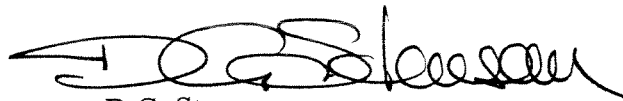
The Bicycle component of the Capital Program makes provision for Cycle Road improvements. It is proposed that the Phase One - Draft Concept Plan development and the public input process outlined in this report would be pursued by staff. Funding in particular for the public input process would need to be included in the Bicycle component of the Capital Program. Route implementation would be funded by a combination of Bicycle component funds and, where appropriate, CNP matching funding. Detailed costs and funding requests would be presented to Council prior to initiation of any phase of the proposed process.

## 6.0 CONCLUSION

A refined Cycling System component of the Burnaby Transportation Plan would better address the short to medium term cycle network needs in Burnaby and allow additional network elements with input from the public, the BAC, and the Traffic and Transportation Committee. It is considered a worthwhile project in that it would provide better guidance to the bicycle planning process and develop a more integrated transportation system. The BAC has been involved in the review process to date and supports the recommendations of this report.

It is therefore recommended that Council forward this report to the Traffic and Transportation Committee (Transportation and Transit Division) for consideration. Should the Traffic and Transportation Committee support the principles of this report, it would then be returned to Council for consideration with the recommendations that Council support the approach towards achieving refinements to the Cycling System concept in the Burnaby Transportation Plan, and that staff be authorized to commence the Phase One - Draft Concept Plan development with further consultation of relevant advisory committees and departments.

Burnaby is fortunate to have had the foresight in developing a multi-tiered Cycling System for such a wide range of user abilities and cycling needs. Refining the Cycling System further as outlined in this report will greatly support the alternative transportation and healthy living goals of the City.


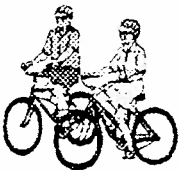












D.G. Stenson  
Director Planning and Building

MP/DAC:lf

Attachments

cc: Director Engineering  
Director Parks, Recreation and Cultural Services  
City Clerk  
MPa:\RefineTransPln

Type of Cyclist	Urban Trail (off-street)	Alternative Cycle Road	Cycle Road
<b>Recreational</b> <i>(Family)</i>			
<b>Commuter</b> <i>(Not So Confident)</i>			
<b>Commuter</b> <i>(Moderately Confident)</i>			
<b>Commuter</b> <i>(Very Confident)</i>			
<b>Recreational</b> <i>(Road Rider)</i>			

**LEGEND:**



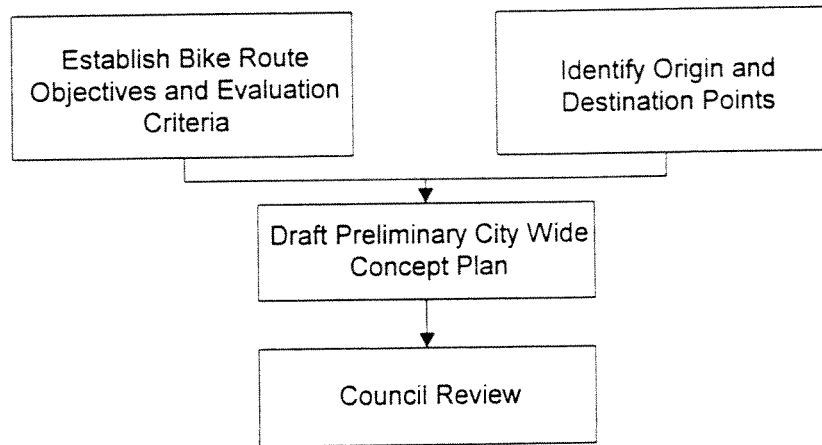
= 1<sup>st</sup> Choice  
(well suited)



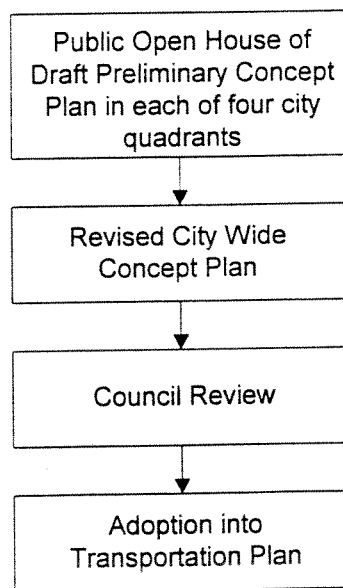
= 2<sup>nd</sup> Choice

**Figure 1**  
Integrated Cycling System  
and Potential Users

## PHASE I - PRELIMINARY CONCEPT PLAN DEVELOPMENT

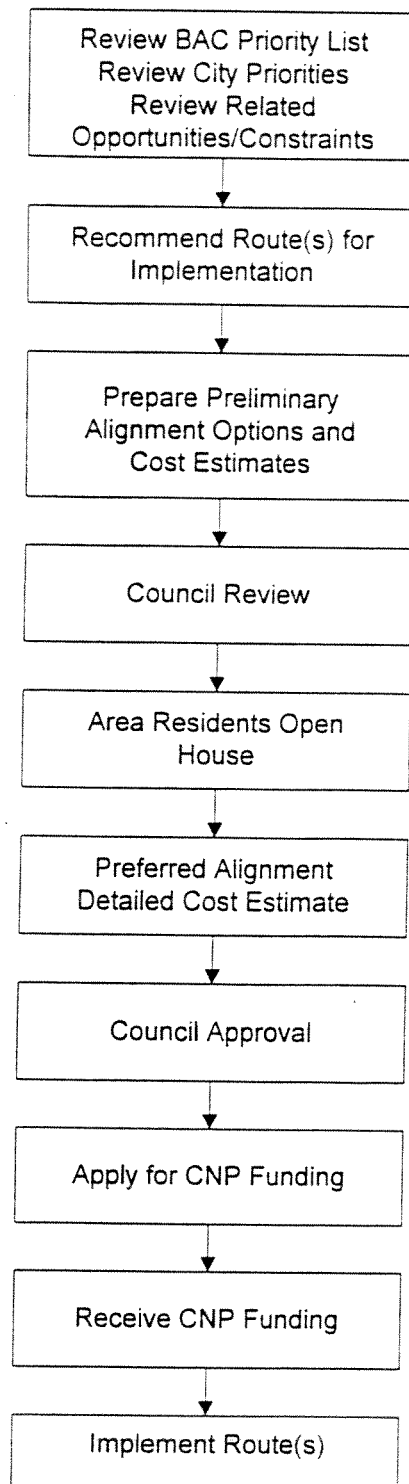


## PHASE II - PUBLIC PROCESS



**Figure 2**  
**Cycling System Refinements**  
**to Transportaion Plan**  
**Conceptual Flowchart**





**Figure 3**  
**Route Implementation**  
**Conceptual Flowchart**

